



CHIPPEWA COUNTY HEALTH DEPARTMENT

508 Ashmun Street, Suite 120
Sault Ste. Marie, Michigan 49783
www.chippewahd.com

September 22, 2011

House Committee on Natural Resources, Tourism, and Outdoor Recreation
Representative Frank Foster, Chair

Re: Testimony for St. Mary's River Water Quality

Dear Committee,

The Chippewa County Health Department has monitored public beaches by means of funding by the Michigan Department of Environmental Quality (MDEQ) for nearly 15 years. Over this period of time, testing and data collection has evolved with new and innovative technology. This would include new methods for rapid detection of fecal indicators. Present day standards at a minimum, allow local health departments to test the water quality for E. coli. It is obligation as public health officials to track and investigate all potential sources whether it is a result of point or non-point source pollution.

In 2006, there have been several observances of possible contaminants found along the shoreline at the north end of Sugar Island in Chippewa County. Bacteria test results have indicated elevated levels of Escherichia coli (E. coli) and the detection of other microbes commonly associated with untreated/partially treated sewage. Consequently a "no body contact" order was issued for the entire north shore of Sugar Island for June through October of 2006. During that same season (August 2006), the East End Sewage Treatment Plant (EESTP) in Sault Ste Marie, Ontario finished a multi-million dollar project upgrading to a secondary treatment facility utilizing UV light disinfection.

As a result of the heavy level of contaminants in the St. Mary's River sited during the 2006 season and prior, the Sugar Island Monitoring Work Group (SIMWG) was developed to gather local, State, and Federal monitoring agencies to better assist response to the public in the event the floating contaminants are observed. This work group continued monitoring with the bulk of the sample collection done by the Chippewa County Health Department through to the end of 2009. Overall, the observations of untreated/partially treated sewage have not been observed since the EESTP was upgraded, although heavy rain has resulted in frequent bypass events from the EESTP, which resulted in elevated levels of E. coli and other forms of debris were periodically observed. The funding for this monitoring was provided by the MDEQ by means of the Clean Michigan Initiative's (CMI) Local Water Quality Monitoring. This was grant funding applied for by CCHD and awarded by the MDEQ.



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Monitoring continued in 2010 under the CMI funding for the North Shore of Sugar Island showing periodic elevations in E. coli levels and frequent EESTP bypass events resulting from heavy rain. Periodic observations of debris such as tampon applicators, condoms, etc. were also sighted during the 2009 season.

In the spring of 2011, CCHD applied for the CMI Local Water Quality funding. Through discussion with MDEQ Surface Water Unit representative Gary Kohlhepp, CCHD was told that the funding for 2011 was not likely to be awarded due to the fact that the water quality conditions on the North shore of Sugar Island has improved. CCHD expressed great concern to Mr. Kohlhepp that this funding will be beneficial considering the North shore of Sugar Island was under a No Body Contact Advisory for a third of the 2010 summer season. Our office was notified in August of 2011 that the funding was declined.

In June of 2011, CCHD began routine surface water monitoring at the Sugar Island Township Park. This is done on a yearly basis and is a required mandated program by the MDEQ to local health departments through the BEACH Act. CCHD staff was limited to only sampling the water at this beach since additional North shore funding was not provided by MDEQ. It is important to note, while reviewing the 2011 E. coli data, only the Sugar Island Township Park was monitored due to the lack of this funding.

On June 27, 2011 CCHD staff observed several items associated with household garbage, including bathroom debris such as condoms and feminine hygiene products. All debris found appeared to be of French-Canadian origin. (See photos).

This debris continued throughout the month of July in great numbers and appeared not only at the Sugar Island Township Park, but along the north Sugar Island shoreline. On July 18th, following a heavy rain in the Twin Sault area, CCHD received a call from Mr. Welch stating that there was a plume of similar type of debris in mass quantities specifically located from the Sault Ste Marie, Ontario's East End Sewage Treatment Plant's release pipe, continuing North to Air Dale Flying Service and Partridge Point.

This debris found during several occasions following a moderate amount of rainfall, was accompanied by a blended bypass release of sewage into the North Channel from the EESTP in Sault Ontario. Also occurring just 36-48 hours prior to the July 18, 2011 bypass, CCHD was notified by the Spills Action Center in Toronto that the EESTP had released untreated sewage into the North Channel due to a power outage. This was a dry weather event.

On Monday July 18, 2011 CCHD staff accompanied by Mr. Wayne Welch went into the North Channel to observe the debris and collect various samples to be tested for E. coli bacteria. These water samples taken in the North Channel were reported to be elevated for E. coli bacteria well above the body contact standards for Michigan and Provincial Ontario. The



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photo representing the plume of debris, shows real-time data points collected by CCHD staff while in the boat. This plume shows the location of all the debris found in the North Channel.

On July 20, 2011, CCHD called a meeting to order between the Sugar Island Incident Response Protocol Team, which is comprised of local, State, Provincial, and Tribal entities. This team is responsible for setting out public response expectations and soliciting possible causes of the reported problems on the St. Mary's River.

The outcome of this meeting directed all parties, specifically the City of Sault Ste Marie Ontario to investigate possible sources to the mass amount of debris. Although no other meetings were called to order during this season, frequent email correspondence occurred. There was no defined course of action taken to achieve a solution to the problem at this time.

The Sugar Island Township Park and North shore of Sugar Island has been **closed to a No Body Contact Advisory over 50 days** between 2010 and 2011 summer sampling season. CCHD received reports of 11 bypass events by the SSM, Ontario's EESTP for the 2011 season; although a recent report from the Ministry of Environment states there were a total of 27 bypass events for this time frame. The SSM, MI STP has had 1 bypass event for this season.

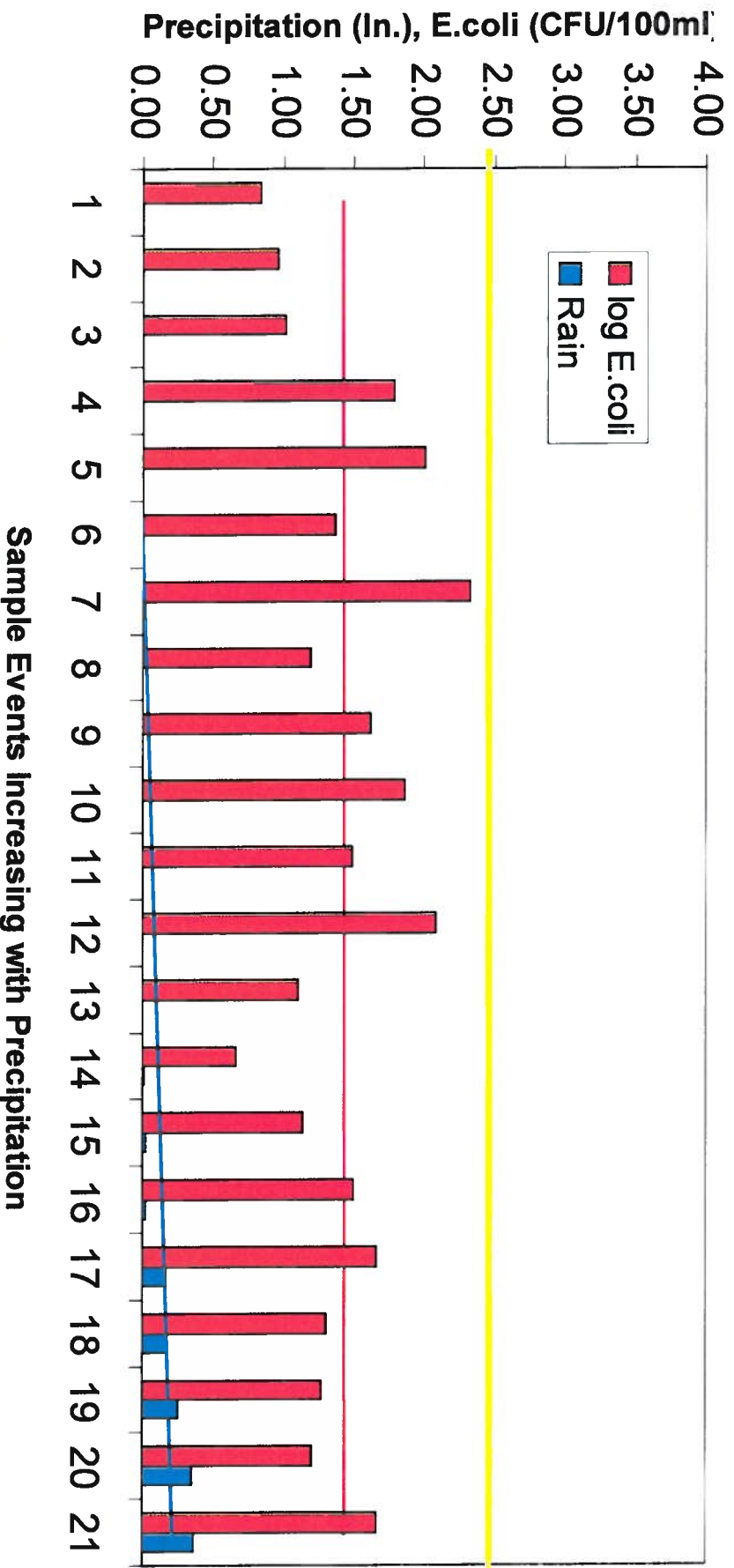
The Chippewa County Health Department's goal is to minimize the potential risk of illness to the public. We continue to protect the people of the community and surrounding areas by means of investigation, monitoring, and public awareness.

There is a great need for additional testing on the North shore of Sugar Island. CCHD staff continue to conduct investigate probable causes and sources to the debris and bacteria found on the North Sugar Island shoreline. CCHD will continue to work with the Sugar Island Incident Protocol Team and request information from the Ontario entities, although when asked how the garbage would be removed from the river, there were no answers as to how or desire to clean up the debris by Ontario.

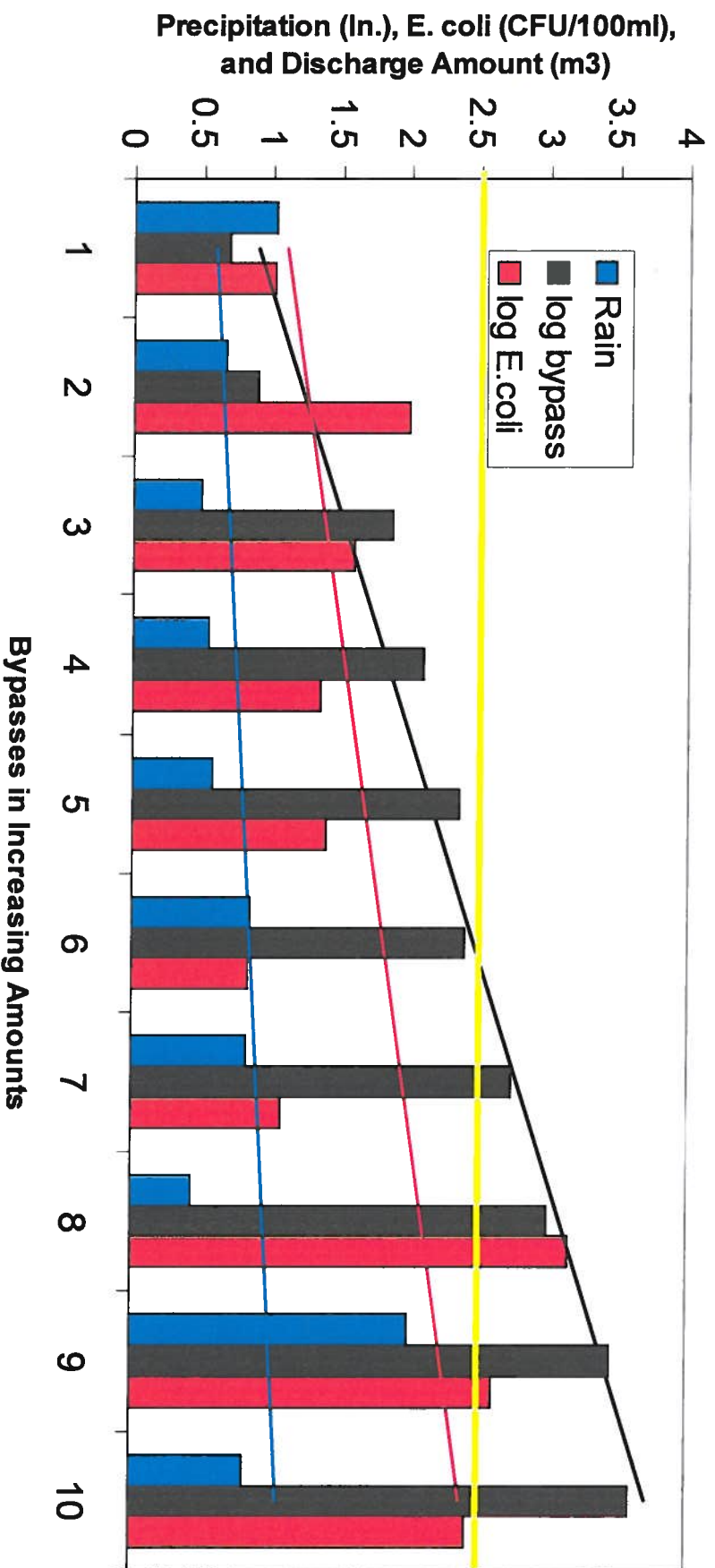
Respectfully Submitted,

Christine Daley,
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2011 No Bypass Sampling Events

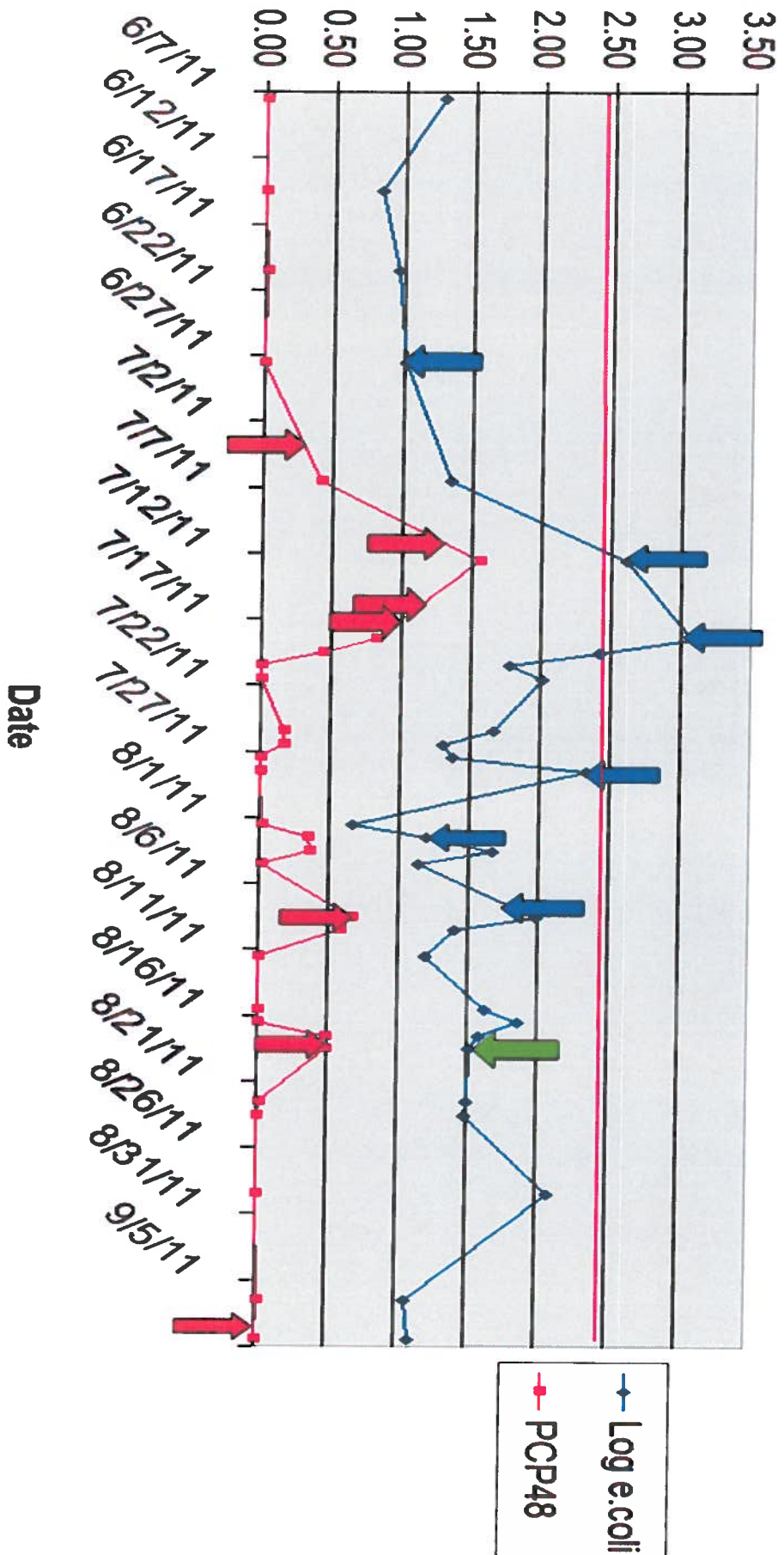


SITP 2011 E.coli, Precipitation, and EETP CSO Volume



Sugar Island 2011

48h Rainfall Total(ln)/log(E.coli)



Red: Bypasses Reported
 Blue: Debris found
 Green: Algae Identified



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Sugar Island Incident Response Protocol Meeting

REVISED

Wednesday July 20, 2011 9 a.m.

Conference Call, call-in provided by Chris Conn, MDEQ

Present On The Call: Christopher Conn, MDEQ; Christine Daley, CCHD, Shane Albreicht, CCHD; Tym Garside, MOE; Kira Fry, MOE; Carl Rumiell, City of SSM, Ontario; Crystal Bole, Sault Tribe of Chippewa;

Absent: Sherri Cleaves, APH

A meeting was called to order due to the amount of floating debris and garbage found along the Northshore of Sugar Island and the Lake George Channel. Christine sent photos and a summary of dates and observations through via email prior to the start of the meeting.

Christine stated a large amount of litter and debris has been cited in the Lake George Channel and along the Northshore of Sugar Island. Below is a summary of what was found by the Chippewa County Health Department:

6/27/2011 at Sugar Island Township Park: Garbage that appears to be from the Duty Free Store, Candy wrappers w/ Fr/En writing; tampon applicators; feminine sanitary napkins; Potato Chip bag w/ Fr/En writing, candy wrappers w/ Fr/EN writing.

7/12/2011 at Sugar Island Township Park: Several wrappers in Fr/En writing

7/18/2011 at Masta Bay (Eitrem property): Tampon Applicator, wrappers from Duty Free Store

7/18/2011 in North Channel: Condoms, condom wrappers in Fr/En writing, tampon applicators, several tampon wrappers, used bandaids, McDonalds cup w/ Canadian Maple Leaf symbol, and several wrappers and garbage in Fr/En writing.

Christine stated that the EH Techs are working on getting a GPS located map identifying the entire area of the plume of garbage in the river.

Carl stated that the litter you see in the photos ends up in the river during large storm events. Trash that is discarded on the ground, in parking lots, parks, streets etc. can ultimately end up in our drainage system. During large events such as last Sunday night we see rainfall intensities that sweep debris through the ravines and creeks and into the river.



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There was also discussion held regarding efforts to evaluate potential sources of garbage and debris from locations near the river on both the Sault Ontario and the Sault Michigan side.

Christine explained the microbial source tracking, sanitary survey, and rapid methods pilot projects currently being conducted by CCHD for 2011-2012 seasons. She invited anyone to participate if interested.

A follow-up meeting will be arranged as needed. Christine stated she will continue to notify the group when debris is cited.

Respectfully Submitted,

Christine Daley,
Lead Sanitarian for Environmental Health
Chippewa County Health Department